ROCKY FLATS PLANT

EMD OPERATING
PROCEDURES MANUAL
VOL I: FIELD OPERATIONS

Manual No.:

New Manual No.:

Procedure No.: Page:

Effective Date:

Organization:

5-21000-OPS-FO

4-11000-ER-OPS-FO

Table of Contents, Rev 69 1 of 3

07/15/94

Environmental Management

THIS IS ONE VOLUME OF A SIX VOLUME SET WHICH INCLUDES:

VOLUME I: FIELD OPERATIONS (FO)
VOLUME II: GROUNDWATER (GW)
VOLUME IV: GEOTECHNICAL (GT)
VOLUME IV: SURFACE WATER (SW)
VOLUME V: ECOLOGY (EE)
VOLUME VI: AIR (AP)

EG&G SUPERSEDED DOCUMENT

TABLE OF CONTENTS FOR VOLUME I: FIELD OPERATIONS

Procedure <u>No.</u>	<u>Title</u>	Rev. <u>No.</u>	Effective <u>Date</u>
FO.01	Air Monitoring and Dust Control	2	05/12/92
FO.03	General Equipment Decontamination	2	05/12/92
94-DMR-001021	Section FO.03 Text Addition	2	05/26/94
94-DMR-001010	Section FO.03 Text Modification	2	06/01/94
•94-DMR-001224	Equipment Decontamination Location Adjustment	2	07/15/94
FO.04	Heavy Equipment Decontamination	2	05/12/92
94-DMR-001009	LIMITED SCOPE Section FO.04 Text Modification	2	06/01/94
FO.05	Handling of Purge and Development Water	2	05/12/92
94-DMR-000278	Groundwater Monitoring Modifications	2	02/25/94
FO.06	Handling of Personal Protective Equipment	2	05/12/92
FO.07	Handling of Decontamination Water and Wash Water	2	05/12/92
94-DMR-001175	LIMITED SCOPE - Decontamination Water Disposal Location Changes	2	06/20/94



ROCKY FLATS PLANT

EMD OPERATING PROCEDURES MANUAL **VOL I: FIELD OPERATIONS** Manual No.: New Manual No.: Procedure No.: Page:

Effective Date:

5-21000-OPS-FO 4-11000-ER-OPS-FO Table of Contents, Rev 69 2 of 3 07/15/94

Organization: **Environmental Management**

			
Procedure <u>No.</u>	<u>Title</u>	Rev. <u>No.</u>	Effective <u>Date</u>
FO.08	Handling of Drilling Fluids and Cuttings		05/12/92
DCN 93.01	Better Consistency of Drum Handling	2	06/29/93
FO.09	Handling of Residual Samples	2	05/12/92
FO.10	Receiving, Labeling, and Handling		•
•	Environmental Materials Containers	2	05/12/92
DCN 93.04	Sample to Drum Traceability	2	06/23/93
DCN 93.05	Drum Labeling Change	2	06/29/93
DCN 93.06	Drum Sample Numbers	· 2	06/29/93
DCN 93.07	SVE Sampling Overlap	2	08/18/93
93-DMR-000677	DMR	2	11/01/93
94-DMR-000244	Drying Agent Modification	2	03/14/94
94-DMR-000558	Form Modification	2	04/15/94
0.11	Field Communications	2	05/12/92
O.12	Decontamination Facility Operations	2	05/12/92
=O.13	Containerization, Preserving, Handling and Shipping of Soil and Water Samples	2	05/12/92
93-DMR-000530	Section FO.13 Modification	2	11/04/93
93-DMR-000667	Section FO.13 Modification	2	11/20/93
94-DMR-000143	Composite Sampling Clarification	2	02/11/94
O.14	Field Data Management	2	05/12/92
DCN 93.05	Replacement of Form 14 C	2	10/06/93
Photoionization Detectors (PIDs) and Flame Ionization Detectors (FIDs)		2	05/12/92
FO.16	Field Radiological Measurements	2	05/12/92
DCN 93.02	LUDLUM/FIDLER Guidance 2 06		06/29/93
FO.17 Determining Out-Of-Specification Analytical Results for Environmental Samples			To Be Added

ROCKY FLATS PLANT

EMD OPERATING
PROCEDURES MANUAL
VOL I: FIELD OPERATIONS

Manual No.: New Manual No.:

Procedure No.:

Page:

Effective Date: Organization:

5-21000-OPS-FO

4-11000-ER-OPS-FO Table of Contents, Rev 69

3 of 3 07/15/94

Environmental Management

Procedure No.	<u>Title</u>	Rev. <u>No.</u>	Effective <u>Date</u>
FO.18	Environmental Sample Radioactivity Content Screening	1	05/12/92
FO.19	Base Laboratory Work	2	05/12/92
FO. 23	Management of Scil and Sediment Investigative Derived Materials (IDM)	re 0	01/11/94
94-DMR-000137 94-DMR-000148 94-DMR-001108	Training Requirements Clarification Section FO.23 Modifications Buried Instrumentation and Existing Soil	0 0 0	01/28/94 02/09/94 06/14/94
FO.25	4-B11-ER-OPS-FO.25 Shipment of Radioactive Materials Samples	0	12/01/93
FO.27	4-BO1-ER-OPS-FO.27 Collection of Floor/Equipment Hot Water Rinsa Samples	ate 0	07/26/93
DCN 93.01 DCN 93.02	VOC Preservatives Fresh Water Samples	0	08/11/93 08/30/93
FO.29	4-H46-ENV-OPS-FO.29 Disposition of Soil and Sediment Investigation-Derived Materials	0	06/24/94
•94-DMR-001226	Allowance of Procedural Use for Waste Piles	0	07/15/94
FO.32	4-I50-ENV-OPS-FO.32 Treated Effluent Discharge Operable Unit 1, Building 891	0	04/13/94

DOCUMENT MODIFICATION REQUEST (DMR)

Page 1 of 1

				sing Instructions. xcept Signatures)		1. Date 6/23/94	25. DMR. No. 94-DMR- 0	001224
	-	ent Number/ -FO.03, Re				3. New Document Number Revision N/A	er or Document Number if it is to be	changed with this
		ne/Phone/Pa 5914/None	ge/Location /080			5. Document Title General Equipment Deco	ontamination	
6. Docu		☑ Procedur	E	7. Document Modification New Revision	• • • • • • • • • • • • • • • • • • • •	Nonintent Change □	Editorial Correction Canc	ellation
8. Item	9. Page	10. Step	T		11	. Proposed Modifications		
1	1			ubsection to the Tab d Using Pressurized		3.2 Cleaning Steel or	Metal Sampling Equipmen	t or Drill Stem
	9	5.3.2	*5.3.2 C	ressurized steam is t Split spoon samplin Drill stems Other small luggab	tal Sampling Equiports be used onsite to ng equipment pieces le equipment pieces	steam clean equipmer	the Field Using Pressurized in the such as:	
			1. 2. 3. 4. 5.	water tank. The grant of the grant of the equipment of th	station that is open oply water to the ge ion system consisting ray water tank is to ntamination from the pment on the wash ment inside the curte of the equipment of ment thoroughly, re-	nerator unit g of a drain in the bo be emptied at the dec e equipment into an I stand. ained wash stand. to be washed extends otating the piece to ens	ttom of the wash station lease on pad when full or at lease DM drum with other drill or out of the curtained area. Soure that all surfaces are cleat before removing from the	t once per week. euttings, before
13			odification, EJO		ald is automatic again	rized to be decentering	nated at the Decontamination	n Pad Field
Decon equipn	taminat	na coring ion of dri	ll stem and	coring equipment wi	ll save time and rec	luce the contamination	nated at the Decontamination risks associated with trans	porting the
			e or a revision, list Block 14, and dates		13, and enter N/A in Blocks	14 and 15. If modification is for an	ny type of change or a cancellation, organiza	ations are listed in Block 13,
13. Organ	ization	14. Print and	i Sign (if applicable)			· · · · · · · · · · · · · · · · · · ·	15. Date (if applicable)
EQS		Steve L	uker/Mike P	eters /s/ Signatur	re on file			
SME		Roy De	aren					7-7-94
			(print/sign/dat 473/293-080	e)) /s/Signature on Fi	le			
31	-		Page/Location /3191/4484/	T891B	18. Cost Center 243	19. Charge Number ENV-FO	20. Requested Completion Date 6/24/94	21. Effective Date 7 15 194
l i	elerated s 🗆 N		23. ORC Re ORC No process.		on-intent change is	being processed as an	n intent change to expedite t	he DMR
			orint, sign, date 18/4675/219		e on File			
<u></u>		.				ВУ	REVIEWED FOR CLA	SSIFICATION/UCNI
						DA	TE NA	

DOCUMENT CLASSIFICATION REVIEW WAIVER FOR R.B. HOFFMAN, CLASSIFICATION OFFICE JUNE 11, 1901

EMD	EG&G ROCKY FLATS PLANT EMD FIELD PROCEDURES SOP Category 2			Manual: Procedure No.: Page: Effective Date: Organization:	5-21000-OPS FO.3, Rev. 2 1 of 18 7 15 94 Environmental Management
TITLE: GENERAL EQUIPMENT DECONTAMINATION				Approved By: /s/ J.E. Evered (Name of Approver)	5/12/94 (Date)
1.0	TABI	E OF C	ONTENTS		
1.0	TAR	FOFC	ONTENTS		
2.0					
3.0					
4.0					4
	4.1	COLU	DOE DEEEDENO		•
	4.1				
5.0	PRO	CEDUR	ES AND EQUIPM	IENT	5
	5.1				5
	5.2			URES FOR TEFLON® OR	
				ENT USED FOR THE COL	
				E ORGANIC COMPOUND	,
	5.3			JRES FOR STAINLESS ST	
	5.5				8
		5.3.1	_		t Without Steam in the Field 9
		5.3.2	_	or Metal Sampling Equipmen	
			Using Pressurize	ed Steam	
	5.4			JRES FOR AUTOMATIC	
		DEC	ONTAMINATION	WATER SAMPLING EQU	IPMENT 9A
		5.4.1	General		9A
		5.4.2	Automatic Samp	oler Headers	
		5.4.3			rs 11
		5.4.4	Reusable Plastic	Composite Sample Containe	ers 11

93D00767.001

94- Drnik - 60 1224

EMD			Page: Effec	edure No.:	5-21000- FO.3, R 2 0 7 5 Environmental Manager	ev. 2 of 18 194
	<u>.</u>			W	· · · · · · · · · · · · · · · · · · ·	
		5.4.5		-	ler Base for Sequential Mode)	12
		5.4.6	•	`	ler Base for Sequential Mode)	
					nic Compounds Analyses	12
		5.4.7	Bottle Siphons Used to Tr	ansfer Sample Fro	om Composite Container	12
	5.5	CLEA	NING PROCEDURES FO	R SAMPLE TUBI	NG	12
		5.5.1	Silastic Rubber Pump Tub	ing Used in Auton	natic Samplers and Other	
			Peristaltic Pumps			12
		5.5.2	Teflon® Sample Tubing			13
		5.5.3	Stainless Steel Tubing			13
		5.5.4	Glass Tubing	• • • • • • • • • • • • • • • • • • • •		13
	5.6	MISC	ELLANEOUS EQUIPMEN	r cleaning pr	OCEDURES	14
		5.6.1	Well Sounders or Tapes U	sed to Measure G	roundwater Levels	14
		5.6.2	Submersible Pumps and H	oses Used to Purg	ge Groundwater Wells	14
		5.6.3	Field Analytical Equipmen	t and Other Field	Instrumentation	1.5
		5.6.4	Ice Chests and Shipping C	ontainers		16
		5.6.5	Uncontaminated and Poter	ntially Contaminate	ed Drums	16
		5.6.6	Cleaning Procedures for S	mall Stainless Stee	l or Teflon® Equipment	
			Used to Sample Media Po	ssibly Containing F	PCBs	18
6.0	QUAL	ITY AS	SURANCE/QUALITY CO	NTROL		18
	6.1	EQUI	PMENT RINSE SAMPLES			18A
7.0	DOCU	MENT	ATION			18A
				ECTIVE PAGES		_
	Pages		Effective	<u>Date</u>	Change Number	
	1-2		06//9 4	7/15/94 ln	✓ 94-DMR-001224	
	9-9A		-06//94-	7/15/94 4	94-DMR-001224	
	10			7/15/94 - 202		
	18		05/26/94		94-DMR-001021	

TOTAL NUMBER OF PAGES: 21 (including forms)

EG&G ROCKY FLATS PLANT

EMD FIELD PROCEDURES SOP

Procedure No.:

Page:

Page:

Organization:

5-21000-OPS

FO.3, Rev. 2

Po of 18

TISP+ Image

Environmental Management

5.3.1 Cleaning Steel or Metal Sampling Equipment Without Steam in the Field

- 1. Scrape gross contamination from equipment while in the exclusion zone.
- 2. Remove equipment from exclusion zone and wash in laboratory detergent and distilled water; a brush may be used for particulate residual.
- 3. Double rinse in distilled water.
- 4. Equipment may now either be wrapped in plastic to prevent cross-contamination or be reused immediately.

5.3.2 Cleaning Steel or Metal Sampling Equipment or Drill Stem in the Field Using Pressurized Steam

Pressurized steam is to be used onsite to steam clean equipment such as:

- Split spoon sampling equipment pieces
- Drill stems
- Other small luggable equipment pieces

This method is to be used only when access is available to a self contained mobile station consisting of:

- Steam/pressure generating unit
- Curtained cleaning station that is open on one side only

EG&G ROCKY FLATS PLANT	Manual:	5-21000-OPS
EMD FIELD PROCEDURES SOP	Procedure No.:	FO.3, Rev. 2
•	Page:	9A of 18
	Effective Date:	7/15/94 lm
Category 2	Organization:	Environmental Management

94-DMR-00 1234 94-DMR-001234

- Source of clean supply water to the generator unit
- Used water collection system consisting of a drain in the bottom of the wash station leading to a gray water tank. The gray water tank is to be emptied at the decon pad when full or at least once per week.
- 1. Scrape gross contamination from the equipment into an IDM drum with other drill cuttings, before placing the equipment on the wash stand.
- 2. Place the equipment inside the curtained wash stand.
- 3. Ensure that none of the equipment to be washed extends out of the curtained area.
- 4. Clean the equipment thoroughly, rotating the piece to ensure that all surfaces are clean.
- 5. Ensure that all free water has drained from the equipment before removing from the wash stand.

5.4 CLEANING PROCEDURES FOR AUTOMATIC DECONTAMINATION WATER SAMPLING EQUIPMENT

5.4.1 General

Automatic samplers will be cleaned as follows:

 The exterior and accessible interior portions (excluding the waterproof timing mechanism) of automatic samplers will be washed with laboratory detergent and rinsed with tap water.